

XES Standard

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Overview

Standard for XES – eXtensible Event Stream
– for achieving interoperability in event logs
and event streams.

XXES

Extensible Event Stream

Goal

- Facilitate export of event logs and event streams from an information system to an analysis tool
 - like, for example, a process mining tool

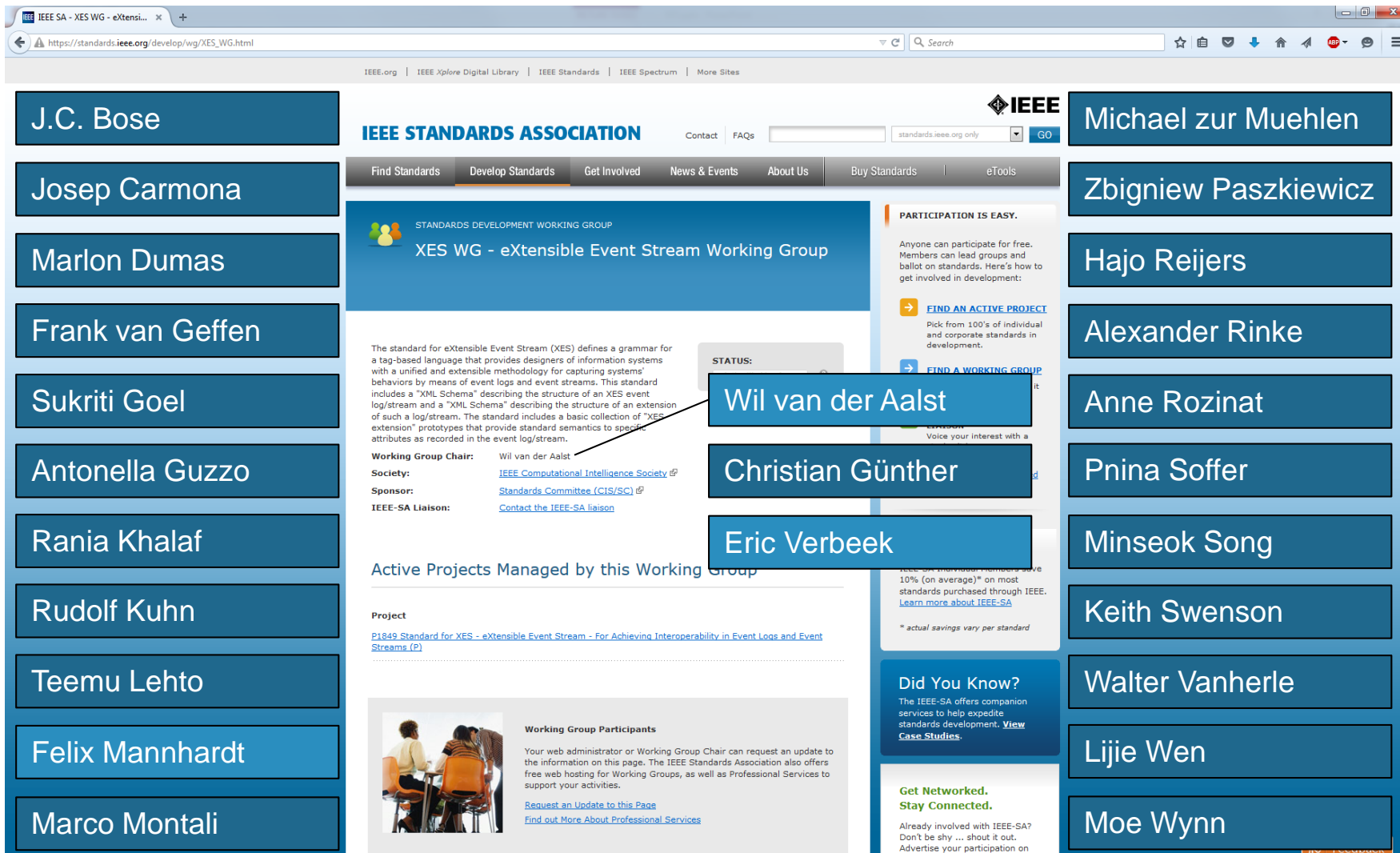


Scope

- To define a grammar for a language capturing event logs and event streams
 - XML Schema for event logs and event streams
 - XML Schema for extensions
 - Basic extensions



Working Group



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XES WG - eXtensible Event Stream Working Group

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STATUS:

The standard for eXtensible Event Stream (XES) defines a grammar for a tag-based language that provides designers of information systems with a unified and extensible methodology for capturing systems' behaviors by means of event logs and event streams. This standard includes a "XML Schema" describing the structure of an XES event log/stream and a "XML Schema" describing the structure of an extension of such a log/stream. The standard includes a basic collection of "XES extension" prototypes that provide standard semantics to specific attributes as recorded in the event log/stream.

Working Group Chair: Wil van der Aalst
Society: [IEEE Computational Intelligence Society](#)
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Active Projects Managed by this Working Group

Project
[P1849 Standard for XES - eXtensible Event Stream - For Achieving Interoperability in Event Logs and Event Streams \(P\)](#)

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Current Status

- Progress
 - XES Standard Proposal is on RevCom agenda
 - Sep 19 (that is, today)
 - Policies and Procedures submitted to sponsor
 - Pending
 - Micro extension approved
- We are on track!

XES Standard Proposal

WG
• Dec 12

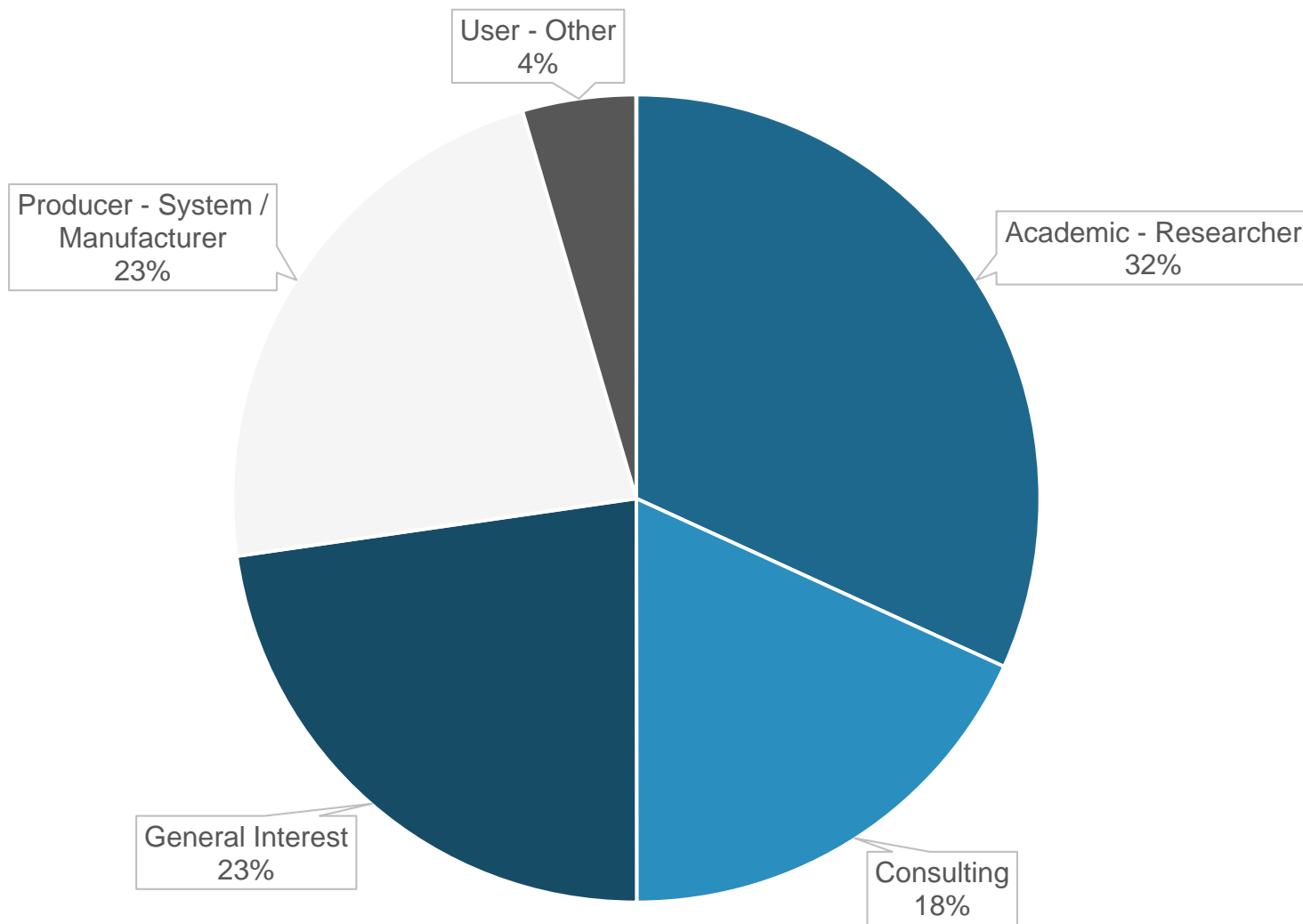
MEC
• Jan 27

Ballot
• Mar 18
• 1 issue

Recirc
• Jul 7



Balloting group

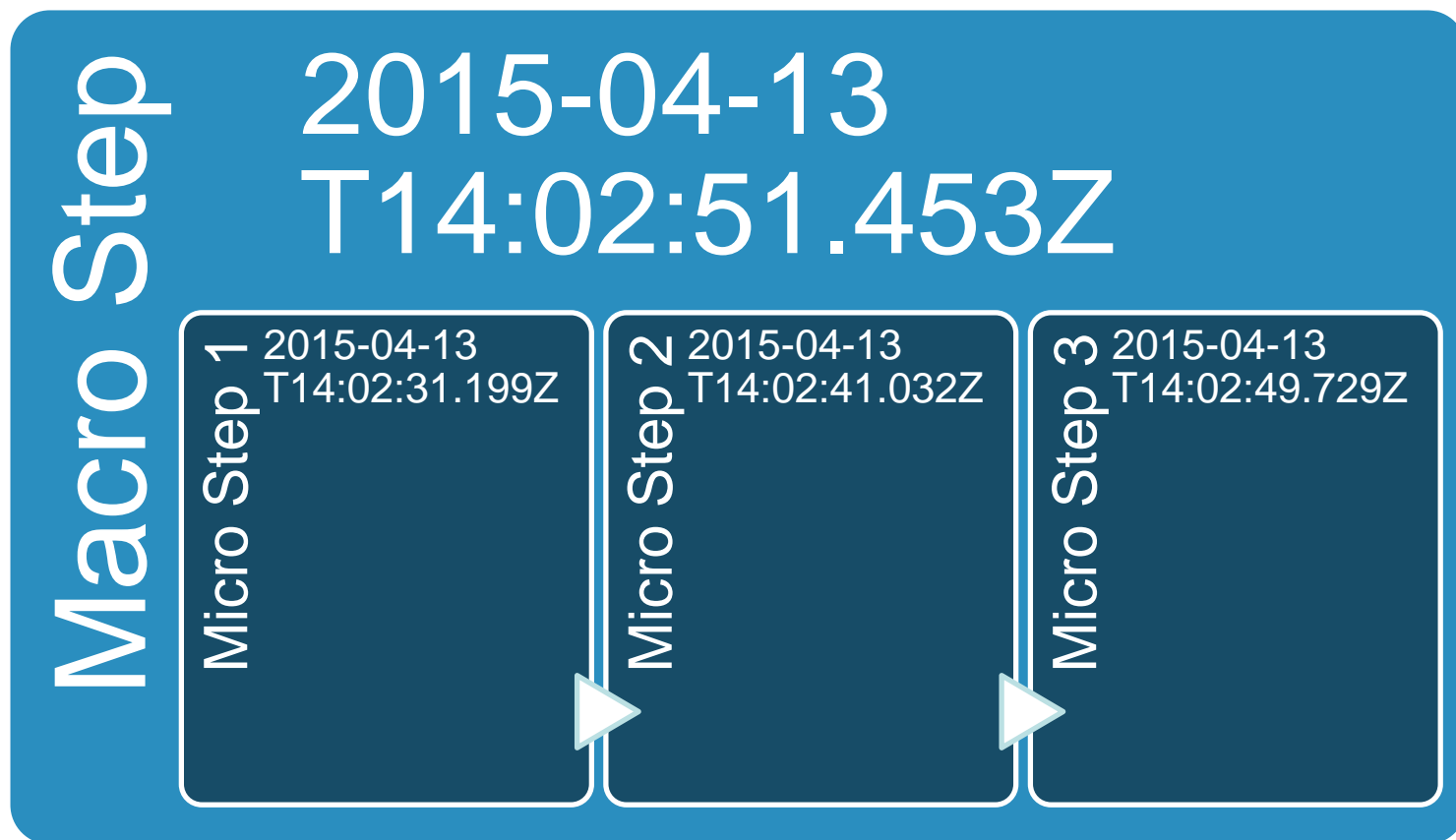


Issue: localtime

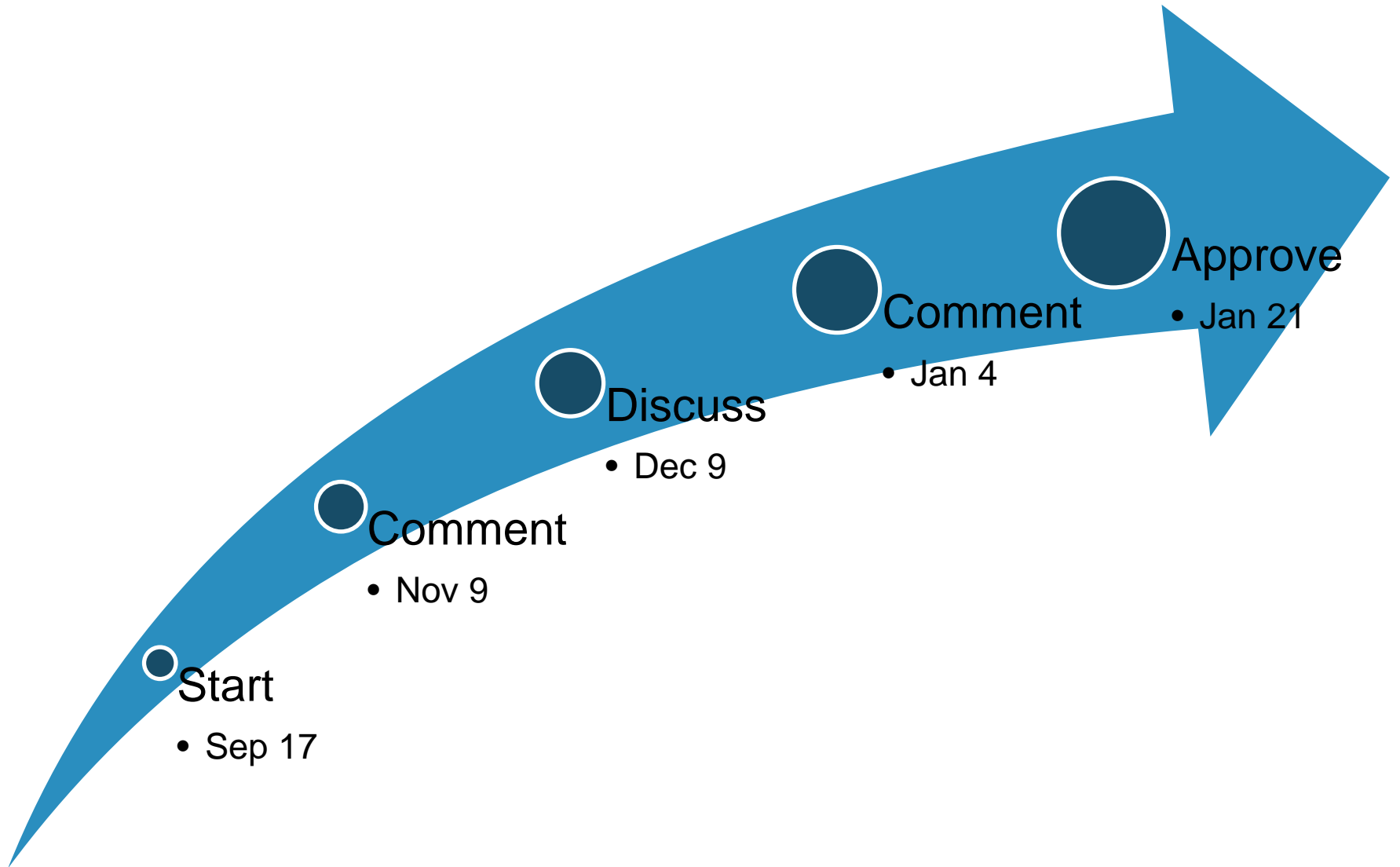
- xs:dateTime
 - This element doesn't specify "which time" is represented. It could be UTC, but also it could be "localtime" or "unspecified time".
 - I think standard should require all timestamps to be exact UTC, no timezone. And using "local time" should be banned - as "local time" is affected by change from/to DST; and order of events in such night would be e.g.: 1:00, 1:15, 1:30, 1:45, 1:00, 1:15; also these two events could be only 15 minutes apart: 1:00 and 2:15.

Micro extension

- Nested activities
 - Subactivities, micro activities, subprocess, ...



Micro extension proposal



Action points

- Add XES support if not yet provided
 - QPR
- Add extensions and analysis techniques exploiting these
 - Micro
- Provide data sets via 3TU data center
 - Now called 4TU data center
 - ...

New data sets

November 3 Josep Carmona

- Activities of daily living of several individuals

April 22 Marcus Dees and Boudewijn van Dongen

- BPI Challenge 2016

July 5 Xixi Lu

- Handling Duplicated Tasks in Process Discovery by Refining Event Labels (BPM2016)

August 15 Maikel Leemans

- JUnit 4.12 Software Event Log

Looking ahead

- RevCom decides today
 - Recommendation to Standards Board

“Upon approval by the IEEE-SA Standards Board, the standard shall be published as an IEEE standard. The Sponsor shall be notified of the approval in writing.”

- Update of OpenXES
- New extensions?
- New data sets?